

# **ABSTRACT**

## **Introduction**

Chronic alcoholism, obesity, hepatitis C and hepatitis B, are the reasons behind continued growing prevalence of chronic liver disease. In cirrhotic patients, portal hypertension and its complications account for significant morbidity and mortality. Imaging, ultrasound techniques such as duplex ultrasonography or spectral Doppler imaging and color Doppler imaging or power Doppler imaging are the modalities of choice,

## **Aims and objectives:**

To find out color Doppler is more specific than gray scale ultra sound findings in patients with portal hypertension

## **Materials and methods**

The study design is cross-sectional study. Radiodiagnosis outpatients and inpatients in Sree Mookambika Institute of Medical Sciences, Kulasekharam. Study Duration: 18 months .Patients clinically suspected for portal vein hypertension undergoing Color Doppler USG were during the study period. Clinical and radiological data from the study was recorded as per the proforma.

## **Result:**

In the present study of the patients were diagnosed to have cirrhosis and of which as high as had alcoholic liver disease. The other etiologies were

portal vein obstruction , malignancy and left sided portal hypertension . In our study, alcoholic liver disease as the predominant cause for liver cirrhosis could be attributed to the high prevalence of alcohol consumption in the geographic region where the study was undertaken.

### **Discussion:**

A total number of 40 patients fulfilled the selection criteria during the study. In the present study males outnumbered females. In this study more than half of the study population presented with age from 51 to 60 years. In the present study 65% of the patients were diagnosed to have cirrhosis and of which as high as 96.15% had alcoholic liver disease. The other etiologies were portal vein obstruction, malignancy and left sided portal hypertension ..

### **Conclusion:**

Color Doppler sonography is a valuable non-invasive alternative which not only provides precise information in localizing and characterizing portal vein among the patients with portal hypertension but is also helpful in identifying the presence of various portosystemic collaterals. The hepatic vein damping index (DI) correlates well with the severity of liver dysfunction in terms of Child Pugh score

**Key words:** Portal hypertension, Ultrasound, Color doppler study.